

CalEPA Electronic Waste Forum: Questions and Answers
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1. How would you make the EU's WEEE model or the models adopted by individual countries work successfully in California?

A successful California e-waste collection and recycling system would have many similar components to the EU's WEEE Directive. Like the EU directive, producers of hazardous consumer electronics should bear primary responsibility for the environmental and public health impacts of their products. Other, specific provisions should be as follows:

- a) Manufacturers should be required to either finance or directly provide for the free and convenient take-back and/or collection of their products from consumers. More than just a means of financing collection and processing, this system should harness market forces to signal manufacturers to design for recycling and reduce the levels of hazardous materials.
- b) Under a front end financing approach, Recycling Incentive Fees (RIFs) on producers should be market-based reflecting the true cost of the environmental impacts for each product (i.e. a CRT device with a high cost of recycling or excessive amounts of hazardous materials should have a higher fee than a device designed for recycling or with lower levels of hazardous materials).
- c) Under a manufacturer take-back or collective 'third party' approach, manufacturers should still be responsible for covering the unique costs of properly managing their products. Additionally, manufacturers and/or their collection/recycling partners should be required to handle devices/materials in a manner that protects public health and the environment.
- d) Manufacturers should be encourage, to the extent feasible, to reduce/eliminate amount of hazardous constituents in their electronic products.
- e) Manufacturers should be encouraged to increase the lifespan and/or reusability of electronic products and components.
- f) Manufacturers should be encouraged to design their electronic products for increased component reuse and recycling.

(Each of these last three objectives can best and most cost effectively be achieved through a true producer responsibility system whereby the system rewards products with lower impacts with lower prices).

- g) Manufacturers should have primary responsibility for educating the public regarding the presence of hazardous materials in their products, the prohibition on the disposal of their products, and on the proper management of their products when they become obsolete. For the most part these hazardous electronics are ‘communications’ devices. It seems appropriate that the potential of this technology be utilized to communicate essential consumer information about the impacts of this technology on public health and the environment and the consumers responsibility for proper management.
- h) California should provide for a regulatory framework for the management of electronic scrap that both protects human health and the environment, while encouraging development of a sustainable reuse and recycling infrastructure.

2. What types of modifications to the WEEE model would you propose that would make WEEE work better?

- a) Need to establish clear consequences for failure to meet recovery/recycling goals: i.e. require the establishment of a consumer refund/bounty system; require the funding of an expanded public education campaign; expansion of recycling/collection infrastructure.
- b) Make uniform recovery/recycling goals – different percentages on different products make it confusing and are arguably unfair. While different devices may have rates phased in at different times based on base level recycling, ultimately all hazardous electronics should be required to be recovered at 95% levels.
- c) Export provisions – the WEEE Directive allows WEEE exported out of the EU to count towards recovery/recycling goals as long as the exporter can prove that the recovery, reuse, and/or recycling operation took place under conditions that are equivalent to the requirements of the directive. The proposal should affirm the Basel Convention ban on the export of hazardous waste, including hazardous electronic scrap, to developing countries.
- d) Implementation timeframe – California does not have the same bureaucratic complexities as Europe, and the objectives in this directive are too important to wait for 30 months to establish. We believe that no more than 12 months from adoption to implementation is reasonable.
- e) Labeling/ public education. Manufacturers should be responsible both for labeling their products and for public education. In addition to labeling requirements regarding a prohibition on disposal, the label should inform that: the product contains hazardous substances; information on how to properly recycle (i.e. 800 number and/or website).

3. What aspects of the WEEE model do not address California's unique electronic waste needs or infrastructure? What are some options or solutions that may be added to the WEEE model to address California's electronic waste?

- a) **Existing E-waste Recycling Enterprises.** Over the 18 months since the Department of Toxics Substances Control affirmed the ban on the disposal of hazardous CRT devices, many local governments have felt compelled to contract with private e-scrap recyclers. These existing California businesses that had generally previously served the private sector have, in many cases, expanded their operations to meet the new need. Whichever path California policy makers choose (direct manufacturer take-back or front end financing), the experience and opportunity presented by these existing businesses should be utilized.
- b) **Collection.** The most significant uncovered cost component of the existing California e-waste crisis is the cost to local government for the collection of hazardous electronic devices. It is unclear whether the collection infrastructure and producer responsibilities as envisioned in Europe will be sufficient to meet the needs of California's 12 million households, most of which have multiple CRT devices.

4. What are some incentives that would encourage manufacturers to incorporate the concept of "design for the environment" into electronic products?

Each manufacturer must ultimately be responsible for internalizing the cost of environmental externalities, be they the cost of recycling or the safe management of hazardous materials for *their products*. Whether this is done through direct producer take-back and recycling or through establishment of a market-based, product specific fees, that reflects the unique net cost of recycling and the level of toxic materials, is open for discussion.

5. Some European countries are interested in utilizing third party organizations to handle the WEEE requirements. How would you adapt such a system to California?

While policy makers should provide manufacturers with the opportunity to establish a third party organization for development and management of hazardous electronics collection and recycling, the State needs to continue to monitor this activity to ensure that it is undertaken in a manner that promotes all of the public policy objectives.

Duales System Deutschland, the 'third party' organization established in Germany in the 1980's to implement that country's packaging recycling system nearly destroyed that program with its inattentiveness to markets and its inability to enforce fee collection.

California's experience with 'third party' organizations has been mixed. In the early days of the California Bottle Bill, both the Glass and PET plastic beverage industries established non-profit 'cartels' to process beverage containers for recycling. While these organizations were adequate in their support of materials collection, the California Glass Recycling Corporation ultimately folded due to the failure of out-of-state manufacturers to participate, and the Plastic Recycling Corporation of California never really succeeded in establishing domestic (California) end-use markets for recycled PET.

A system whereby manufacturers establish a third party cartel that merely taxes member companies based on sales, with the generic cost passed on to consumers, may achieve the goal of financing the recycling of hazardous electronics